

**Delaware Department of Transportation
Division of Transportation Solutions
Design Guidance Memorandum**

Memorandum Number: **1-11**

1. Road Design Manual 2. Bridge Design Manual 3. Utilities Design Manual
4. Real Estate Manual 5. Standard Specifications 6. Standard Construction Details
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Title: **Subsurface Investigation for Consultant Designed Projects**

Effective date: June 1, 2003

Implementation by: X Project Teams, X Bridge, Team Support,
 Specifications, Utility, Real Estate, X Quality, DTC, Other M&R

I. Purpose:

To inform consultant managers of the procedures required to obtain soil drilling and subsequent soil testing services for consultant designed projects of structures (embankments, bridge abutments, retaining walls, etc.). For Department design projects, contact Materials & Research's Geotechnical Engineer.

See also **DGM 1-9 Defining Pavement Cores and Subsurface Investigation** and **DGM 1-10 - Pavement Design Requirements** for more details.

II. Design Guidance:

In order for the design consultant to have adequate subsurface (soils) information for design purposes, the design consultants must:

- Develop the subsurface investigation plan to have drilling and inspection services provided under their direction.
- Notify the consultant manager of the scope of the subsurface investigation plan and provide a boring plan sheet(s) to the Department. The consultant manager will forward the boring plan to the Materials & Research (M&R) Geotechnical Engineer
- Specify to M&R what soil testing is requested.
- Inform the Geotechnical Engineer when drilling and soil sampling is to begin and provide the name and phone number of the consultant designer who is to receive the M&R soil test information.
- Arrange to have the soil samples and copies of the field logs brought to the M&R lab within 24 hours after obtaining samples.

The Geotechnical Engineer's responsibilities are to:

- Perform, or arrange for, all soils testing required for the project as requested by the design consultant.
- Furnish completed boring logs and laboratory test summaries to the design consultant with a courtesy copy to the consultant manager.
- Provide the consultant manager regular weekly updates on the progress of the drilling/testing programs.
- Inform the consultant manager when problems arise and when the testing programs are completed.

III. Justification:

To clarify the requirements of subsurface investigation and the responsibilities of all parties. All references in this DGM are in compliance with the November, 1999 **Del DOT Record of Decision (ROD) on Subsurface Investigations**.

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